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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number 09/915,231  
Filing Date July 24, 2001  
First Named Inventor FAN  
Group Art Unit 1645 1634  
Examiner Name Not Yet Assigned  
Attorney Docket Number A-68929-6/DJB/RMS/DCF

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Sheet 1 of 6

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
W	1	4,200,110		Peterson et al.	4/1980	
	2	4,499,052		Fulwyler	2/1985	
	3	4,682,895		Costello	7/1987	
	4	4,785,814		Kane	11/1988	
	5	4,822,746		Walt	4/1989	
	6	4,824,789		Yafuso et al.	4/1989	
	7	4,999,306		Yafuso et al.	3/1991	
	8	5,002,867		Macevicz	3/1991	
	9	5,028,545		Soini	7/1991	
	10	5,105,305		Betzig et al.	4/1992	
	11	5,114,864		Walt	5/1992	
	12	5,132,242		Cheung	7/1992	
	13	5,143,853		Walt	9/1992	
	14	5,194,300		Cheung	3/1993	
W	15	5,244,636		Walt et al.	9/1993	

## FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
W	16	EP	0 269 764	A1	Molecular Biosystems, Inc.	6/1988		
	17	EP	0 392 546	A2	Drmanac et al.	10/1990		
	18	EP	0 478 319	A1	Kabushiki Kaisha Toshiba	4/1992		
	19	EP	0 723 146	A1	SRI International	7/1996		
	20	WO	89/11101	A1	Dynal A.S.	11/1989		
	21	WO	93/02360	A1	Transmed Biotech Incorporated	2/1993		
	22	WO	96/03212	A1	Brenner	2/1996		
	23	WO	97/14028	A2	Luminex Corp.	4/1997		
	24	WO	97/14928	A1	Brint, N.	4/1997		
	25	WO	97/40385	A1	Seul, M.	10/1997		
W	26	WO	98/40726	A1	Trustees of Tufts College	9/1998		

Examiner Signature

*Walt*

Date Considered

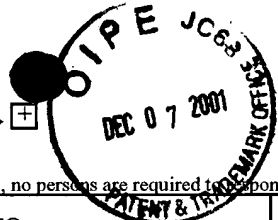
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
Application Number		09/915,231		RECEIVED DEC 12 2001 TECH CENTER 1600/2900	
Filing Date		July 24, 2001			
First Named Inventor		FAN			
Group Art Unit		1645 1634			
Examiner Name		Not Yet Assigned			
Sheet	2	of	6	Attorney Docket Number A-68929-6/DJB/RMS/DCF	

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W	27	5,244,813		Walt et al.	9/1993	_____
	28	5,250,264		Walt et al.	10/1993	_____
	29	5,252,494		Walt	10/1993	_____
	30	5,254,477		Walt	10/1993	_____
	31	5,298,741		Walt et al.	3/1994	_____
	32	5,302,509		Cheeseman	4/1994	_____
	33	5,320,814		Walt et al.	6/1994	_____
	34	5,357,590		Auracher	10/1994	_____
	35	5,380,489		Sutton et al.	1/1995	_____
	36	5,435,724		Goodman et al.	7/1995	_____
	37	5,474,895		Ishii et al.	12/1995	_____
	38	5,481,629		Tabuchi	1/1996	_____
	39	5,494,798		Gerdt et al.	2/1996	_____
	40	5,496,997		Pope	3/1996	_____
	41	5,512,490		Walt et al.	4/1996	_____
	42	5,516,635		Ekins et al.	5/1996	_____
V	43	5,565,324		Still et al.	10/1996	_____

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
W	44	WO	98/50782	A3	Trustees of Tufts College	11/1998	_____	
	45	WO	98/53093	A1	Bioarray Solutions LLC	11/1998	_____	
	46	WO	98/53300	A2	Lynx Therapeutics, Inc.	11/1998	_____	
	47	WO	99/18434	A1	Trustees of Tufts College	4/1999	_____	
	48	WO	99/60170	A1	Hyseq Inc.	11/1999	_____	
	49	WO	99/67414	A1	Glaxo Group Ltd.	12/1999	_____	
	50	WO	99/67641	A2	Illumina Inc.	12/1999	_____	
	51	WO	00/04372	A1	Univ. of Texas	1/2000	_____	
↓	52	WO	00/13004	A2	Trustees of Tufts College	3/2000	_____	

Examiner Signature <i>Walt</i>	Date Considered	12/10/2002
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<b>Application Number</b>	09/915,231
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<b>Filing Date</b>	July 24, 2001
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<b>First Named Inventor</b>	FAN
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Group Art Unit	1645
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Examiner Name	Not Yet Assigned
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Attorney Docket Number	A-68929-6/DJB/RMS/DCF
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Sheet

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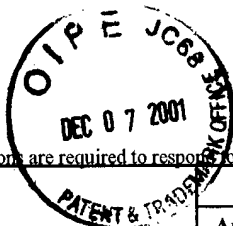
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Sheet	4	of	6	Application Number	09/915,231
				Filing Date	July 24, 2001
				First Named Inventor	FAN
				Group Art Unit	1645 7634
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	A-68929-6/DJB/RMS/DCF

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		Number	Kind Code <sup>2</sup> (if known)			
<i>m</i>	77	6,013,456		Akgavan-Tafti	01/2000	
	78	6,051,380		Sosnowski et al.	04/2000	
	79	6,110,678		Weisburg et al.	08/2000	
	80	6,172,218	B1	Brenner	01/2001	
	81	6,083,763		Balch	07/2000	
	82	5,494,810		Barany et al.	02/1996	
	83	5,830,711		Barany et al.	11/1998	
	84	6,027,889		Barany et al.	02/2000	
	85	6,054,564		Barany et al.	0/2000	
	86	6,251,639	B1	Kurn	06/2001	
	87	6,268,148	B1	Barany et al.	07/2001	
	88	5,854,033		Lizardi	12/1998	
	89	5,554,516		Kacian et al.	09/1996	
	90	5,541,311		Dahlberg et al.	07/1996	
<i>↓</i>	91	5,660,988		Duck et al.	08/1997	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
<i>m</i>	92	WO	98/13523	A1	Pyrose Quencing AB	04/1998		
	93	WO	93/25563	A1	City of Hope	12/1993		
	94	WO	97/31256	A2	Cornell Research Foundation	08/1997		
	95	WO	00/58516	A2	Whitehead Institute for Biomedical Research	10/2000		
<i>↓</i>	96	WO	00/71992	A1	Illumina Inc.	11/2000		

Examiner Signature	<i>m</i>	Date Considered	12/10/2002
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Sheet	5	of	6	Application Number	09/915,231
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				Examiner Name	Not Yet Assigned
				Attorney Docket Number	A-68929-6/DJB/RMS/DCF

## **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
W	97	Abel et al., "Fiber-Optic Evanescent Wave Biosensor for the Detection of Oligonucleotides," Anal. Chem. 68:2905-2912 (1996).	
	98	Anonymous, "Microsphere Selection Guide," Bandg Laboratories, (Fisher, IN) September 1998.	
	99	Anonymous, "Fluorescent Microspheres," Tech. Note 19, Bang Laboratories, (Fishers, IN) February 1997.	
	100	Bangs, L.B., "Immunological Applications of Microspheres," The Latex Course, Bangs Laboratories (Carmel, IN) April 1996.	
	101	Barnard et al., "A Fibre-Optic Chemical Sensor with Discrete Sensing Sites," Nature, 353:338-340 (September 1991).	
	102	Chen et al., "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension," Genome Research, 10(4):549-557 (2000).	
	103	Czarnik, "Illuminating the SNP Genomic Code," Modern Drug Discovery, 1(2): 49-55 (1998).	
	104	Drmanac, R. et al., "Sequencing by Oligonucleotide Hybridization: A Promising Framework in Decoding of the Genome Program," The First International Conference on Electrophoresis, Supercomputing and the Human Genome, Proceeding on th April 10-13, 1990 Conference at Florida State University. Ed. C. Cantor and H. Lim.	
	105	Drmanac, R. et al., "Prospects for a Miniaturized, Simplified and Frugal Human Genome Project," Scientia Yugoslavica, 16(1-2):97-107 (1990).	
	106	Drmanac, R. et al., "Sequencing by Hybridization (SBH) with Oligonucleotide Probes as an Integral Approach for the Analysis of Complex Genomes," International Journal of Genome Research, 1(1):59-79 (1992).	
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	108	Ferguson et al., "A Fiber-Optic DNA Biosensor Microarray for the Analysis of Gene Expression," Nature Biotechnology, 14:1681-1684 (1996).	
	109	Fuh et al., "Single Fibre Optic Fluorescence pH Probe," Analyst, 112:1159-1163 (1987).	
	110	Healey et al., "Improved Fiber-Optic Chemical Sensor for Penicillin," Anal. Chem. 67(24):4471-4476 (1995).	
	111	Healey et al., "Development of a Penicillin Biosensor Using a Single Optical Imaging Fiber," SPIE Proc. 2388:568-573 (1995).	
	112	Healey et al., "Fiberoptic DNA Sensor Array Capable of Detecting Point Mutations," Analytical Biochemistry, 251:270-279 (1997).	
	113	Hirschfeld et al., "Laser-Fiber-Optic "Optrode" for Real Time In Vivo Blood Carbon Dioxide Level Monitoring," Journal of Lightwave Technology, LT-5(7):1027-1033 (1987).	
✓	114	Iannone et al., "Multiplexed Single Nucleotide Polymorphism Genotyping by Oligonucleotide Ligation and Flow Cytometry," Cytometry, 39:131-140 (2000).	

Examiner Signature	<i>[Signature]</i>	Date Considered	12/10/2002
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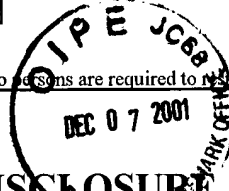
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Sheet	6	of	6
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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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u	115	Michael et al., "Making Sensors out of Disarray: Optical Sensor Microarrays," Proc. SPIE, 3270: 34-41 (1998).	
	116	Michael et al., "Randomly Ordered Addressable High-Density Optical Sensor Arrays," Anal. Chem. 70(7): 1242-1248 (April 1998).	
	117	Michael et al., "Fabrication of Micro- and Nanostructures Using Optical Imaging Fibers and there Use as Chemical Sensors," Proc. 3rd Intl. Symp., Microstructures and Microfabricated Systems, ed. P.J. Hesketh, et al., v. 97-5, Electrochem. Soc., 152-157 (Aug. 1997).	
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	121	Peterson, J. et al., "Fiber Optic pH Probe for Physiological Use," Anal. Chem., 52:864-869 (1980).	
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	126	Walt, "Fiber-Optic Sensors for Continuous Clinical Monitoring," Proc. IEEE, 80(6): 903-911 (1992).	
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	128	Shoemaker et al., "Quantitative phenotypic analysis of yeast deletion mutants using a highly parallel molecular bar-coding strategy," Nature Genetics, 14:450-456 (1996). (A, AS, NA) added 8/1/01	
↓	129	Metzker et al., "Termination of DNA synthesis by novel 3'-modified-deoxyribonucleoside 5'-triphosphates," Nucleic Acids Research, 22(20):4259-4267 (1994).	

Examiner Signature	<i>Falt u</i>	Date Considered	12/10/wor
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